Docket JP919990715US1

Appl. No.: 09/438,645
Filed: November 12, 1999

IN THE CLAIMS

A set of all pending claims is set out immediately below marked up to indicate changes relative to the immediately preceding version. For each currently amended claim that is set out below, please enter the amended claim as a substitute for the previous version or versions of the claim.

1. (canceled)

2. (currently amended) A method for testing performance of a server running a chosen computing application, wherein the server communicates with a client and a computing operation performed by the client resides in an application layer that communicates with a middleware layer on the client, the method comprising the steps of:

(a) forming on the client a first collection of a number of live maps, wherein such a live map includes i) identification of ~~an application layer~~ transaction for actual processing by the server running a chosen computing application, and ii) data for the chosen application, including data formed at the client application layer, and wherein the chosen computing application of the transaction for such a live map is the same for each of the live maps in the collection;

(b) passing the collection from the client application layer to the client middleware layer;

(c) transmitting a first processing load from the client to the server running said computing application, wherein the processing load includes the first collection of the number of said live maps for a plurality of said transactions;

(d) measuring one or more performance criteria resulting from said server actually processing said load, wherein the measuring ~~is performed by the client or the server~~ _of one or more performance criteria includes: i) time stamping such a live map by the client before the transmitting of such a processing load to the server and ii) receiving, by the client, a reply map for the live map from the server after the server processes the load, wherein the reply map includes server processing time measured by the server so that the client is able to compute elapsed time from a client perspective and compare ones of the client-perspective elapsed times to ones of the server processing times for specific ones of the application layer transactions to determine server and network latency;_ and

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(e) changing the first collection of live maps and transmitting a next processing load from the client to the server, the next processing load including the changed collection of live maps, in order to selectively vary said processing loads, wherein the changing includes changing the number of said live maps and types of said transactions in the first collection of live maps transmitted to said server, and wherein said measuring step (d) is repeated for the next processing load.

3. (previously presented) The method of claim 2, comprising the further step of:

(f) comparing said performance criteria against predetermined performance measures to determine whether said server's capacity is satisfactory.

4. (previously presented) The method of claim 3, whereby said performance criteria include average response time for a transaction within such a load.

5. (previously presented) The method of claim 3, whereby said performance criteria include the proportion of server CPU time taken by a transaction of such a load.

6. (previously presented) The method of claim 1, wherein step (d) comprises, for each transaction within said load, returning a result to said client; and measuring, by said client or by said server, the one or more performance criteria responsive to the processing of said load by said server.

7 through 9. (canceled)

10. (currently amended) A system for testing server performance, said system comprising:

(a) a server running a chosen computing application;

(b) a client emulation server ("client") representing a plurality of individual client computing stations, wherein a computing operation performed by the client resides in an application layer that communicates with a middleware layer on the client, said client emulation server including a first collection of a number of live maps passed from the client application layer to the client middleware layer, wherein such a live map includes i) identification of an

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application layer transaction for actual processing of the transactions by the server running the chosen computing application, and ii) data for the chosen application, including data formed at the client application layer, and wherein the chosen computing application of the transaction for such a live map is the same for each of the live maps in the collection; and

(c) a communications connection between said client and said server, wherein said client is operable to transmit a first processing load to said server, via said communications connection, the processing load including the first collection of said live maps for a plurality of said transactions, said server is operable to actually process said load, wherein said server or client, but not necessarily both the server and client, the system is operable to measure one or more performance criteria resulting from the server processing said load, wherein the measuring of one or more performance criteria includes: i) time stamping such a live map by the client before the transmitting of such a processing load to the server and ii) receiving, by the client, a reply map for the live map from the server after the server processes the load, wherein the reply map includes server processing time measured by the server so that the client is able to compute elapsed time from a client perspective and compare ones of the client-perspective elapsed times to ones of the server processing times for specific ones of the application layer transactions to determine server and network latency; and wherein said client is further operable to change the first collection of live maps and transmit a next processing load to the server, the next processing load including the changed collection of live maps, in order to selectively vary said processing loads, wherein the changing includes changing the number of said live maps and types of said transactions in the first collection of live maps, and the server or client is operable to repeat the measuring for the next processing load.

11. (canceled)

12. (previously presented) The system of claim 10, wherein said server compares said measured performance criteria against predetermined performance measures to determine whether the server has satisfactory capacity.

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13. (previously presented) The system of claim 12, wherein said server stores a file of said performance data measures.

14. (previously presented) The system of claim 13, wherein said client stores a file of said performance data measures.

15. (previously presented) The system of claim 12, wherein said performance data criteria includes the average response time for a transaction within one of said loads.

16. (previously presented) The system of claim 12, wherein said performance data criteria includes the proportion of server CPU time taken by such a transaction of said loads.

17. (previously presented) The system of claim 12, wherein said server has connection to one or more database servers, said database servers being operable to execute portions of said load transactions.

18. (previously presented) The system of claim 12, wherein said server comprises a plurality of servers, and each of said server plurality has connection to one or more database servers, said database servers being operable to execute portions of said load transactions.

19 through 21. (canceled)

22. (previously presented) The system of claim 10, said system comprising:
at least one database in communication with said server.

23 through 27. (canceled)

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